AMENDMENTS TO THE CLAIMS

Please cancel claims 20 and 22, add claims 45-52, and amend the claims as follows:

- 1-11. (Cancelled)
- 12. (Currently Amended) A vegetable oil based polyol, comprising

(I)
$$x - A - H p$$
q and (II) $x - A - H t$

Reply to Office Action dated January 26, 2009

where

A1 is

R is a residue of a polyol, polyamine or aminoalcohol initiator, wherein at least one of the amine or alcohol groups of the initiator has been reacted with an alkoxylating agent so that initiator has a number average molecular weight of at least about 625;

X and X' may be the same or different and is O, N or NH; p is an integer from 1 to 5; q is an integer from 1 to 5 wherein p + q is from 2 to 8, t is an integer from 2 to 8 and A may be the same or different and is selected from the group consisting of A1, A2 and A3 where

Application No. 10/553,767 Amendment dated June 26, 2009 Reply to Office Action dated January 26, 2009

A2 is
$$\begin{array}{c|c} & & & & \\ & &$$

A3 is
$$\begin{array}{c|c} & & & & \\ & &$$

where m, n, v, r, s, a, b and c are integers and m is greater than 3, n greater than or equal to zero and m+n is from 11 to 19, v is greater than 3, r is greater than or equal to zero, s is greater than or equal to zero and v+r+s is from 10 to 18, a is from 0 to 35, b is from 0 to 35, and c is greater than 0 and less than 35, wherein the amount of A3 is at least 0.05 weight percent of the vegetable oil based polyol, and wherein (a+b+c)/(p+q+t) is greater than 0 and up to about 100 in the vegetable oil based polyol.

- 13. (Previously Presented) The vegetable oil based polyol of Claim 12 wherein (a+b+c)/(p+q+t) is about 0.5 to 50.
- 14. (Previously Presented) The vegetable oil based polyol of Claim 13 wherein (a+b+c)/(p+q+t) is about 1 to 25.
- 15. (Previously Presented) The vegetable oil based polyol of Claim 12 wherein the initiator has a secondary hydroxyl group.

16. (Previously Presented) The vegetable oil based polyol of Claim 12 wherein at least a portion of the vegetable oil based polyol has a structure

5

$$\begin{bmatrix} X - A - H \\ Y - H \end{bmatrix}_{q}$$

where at least one X'-H group is a primary hydroxyl or primary amine and at least one X-A-H group is located at a position corresponding to a secondary hydroxyl or secondary amine of the initiator.

17. (Original) The vegetable oil based polyol of Claim 16 wherein at least a portion of the vegetable oil based polyol has a structure:

$$\begin{bmatrix} X - A - H \end{bmatrix}_{p}$$

where all of the X'-H groups are a primary hydroxyl or primary amine and all of the X-A-H groups are located at a position corresponding to a secondary hydroxyl or secondary amine of the initiator.

- 18. (Currently Amended) The vegetable oil based polyol of Claim 17 wherein the initiator is glycerol where at least one of the alcohol groups of the glycerol has been reacted with ethylene oxide or propylene oxide.
- 19. (Currently Amended) The vegetable oil based polyol of Claim 12 wherein the initiator is selected from the group consisting of neopentylglycol; 1,4-cyclohexane diol; 2,5-hexanediol; 1,2-propylene glycol; trimethylolpropane; pentaerythritol; sorbitol; sucrose; glycerol; 1,6-hexanediol; 1,4-butanediol; ethylene glycol; diethylene glycol; triethylene glycol; bis-3-aminopropyl methylamine; ethylene diamine; diethylene triamine; 9(1)-hydroxymethyloctadecanol; 1,4-bishydroxymethylcyclohexane; 8,8-bis(hydroxymethyl)tricyclo[5,2,1,0^{2,6}]decene; Dimerol alcohol; hydrogenated bisphenol; 9,9(10,10)-bishydroxymethyloctadecanol; 1,2,6-hexanetriol; any of the aforementioned where wherein at least one of the alcohol or amine groups present therein has been

Amendment dated June 26, 2009
Reply to Office Action dated January 26, 2009

reacted with ethylene oxide, propylene oxide or mixture thereof; and combination thereof.

- 20. (Cancelled)
- 21. (Currently Amended) The vegetable oil based polyol of Claim 12 wherein the vegetable oil based polyol is a liquid and has a weight average molecular weight of at least 350 1500.
- 22. (Cancelled)
- 23. (Currently Amended) The vegetable oil based polyol of Claim 22 21 wherein the weight average molecular weight is at least about 1800.
- 24-41. (Cancelled)
- 42. (Previously Presented) A polyurethane comprised of the reaction product of a polyisocyanate and the vegetable oil based polyol of Claim 12.
- 43-44. (Cancelled)
- 45. (New) A vegetable oil based polyol comprised of

(I)
$$x - A - H p$$
q and (II) $x - A - H t$

where

R is a residue of a polyol, polyamine or aminoalcohol initiator;

X and X' may be the same or different and is O, N or NH; p is an integer from 1 to 5; q is an integer from 1 to 5 wherein p + q is from 3 to 8, t is an integer from 3 to 8 and A may be the same or different and is selected from the group consisting of A1, A2 and A3 where

Application No. 10/553,767 Amendment dated June 26, 2009 Reply to Office Action dated January 26, 2009

$$\begin{bmatrix} O \\ \parallel \\ C - (CH_2)_m - CH - CH_2 - O - \\ \parallel \\ (CH_2)_n CH_3 \end{bmatrix}$$

A1 is

A2 is
$$\begin{array}{c|c} & & & & \\ & & & & \\ & & & \\ \hline \\ & & &$$

7

A3 is
$$\begin{array}{c|c} & & & & \\ & &$$

where m, n, v, r, s, a, b and c are integers and m is greater than 3, n greater than or equal to zero and m+n is from 11 to 19, v is greater than 3, r is greater than or equal to zero, s is greater than or equal to zero and v+r+s is from 10 to 18, a is above 0 and less than 35, b is above 0 and less than 35 and c is above 0 and less than 35, so long as A1 has a weight ratio of between about 10 and about 95 weight percent of the total weight of A+A2+A3, A2 has a weight ratio of between about 1 and about 65 weight percent of the total weight of A+A2+A3, A3 has a weight ratio of between about 0.1 and about 10 weight percent of the total weight of A+A2+A3, and the weight ratio of A2 to A3 is greater than 5/1.

46. (New) The vegetable oil based polyol of Claim 46 wherein at least a portion of the vegetable oil based polyol has a structure

$$\begin{bmatrix} X - A - H \end{bmatrix}_{p}$$

8

where at least one X'-H group is a primary hydroxyl or primary amine and at least one X-A-H group is located at a position corresponding to a secondary hydroxyl or secondary amine of the initiator.

47. (New) The vegetable oil based polyol of Claim 47 wherein at least a portion of the vegetable oil based polyol has a structure:

$$\begin{bmatrix} X - A - H \\ X - H \end{bmatrix}_{q}$$

where all of the X'-H groups are a primary hydroxyl or primary amine and all of the X-A-H groups are located at a position corresponding to a secondary hydroxyl or secondary amine of the initiator.

- 48. (New) The vegetable oil based polyol of Claim 47 wherein the initiator is glycerol where at least one of the alcohol groups of the glycerol has been reacted with ethylene oxide or propylene oxide.
- 49. (New) The vegetable oil based polyol of Claim 47 wherein the initiator is selected from the group consisting of neopentylglycol; 1,4-cyclohexane diol; 2,5-hexanediol; 1,2-propylene glycol; trimethylolpropane; pentaerythritol; sorbitol; sucrose; glycerol; 1,6-hexanediol; 1,4-butanediol; ethylene glycol; diethylene glycol; triethylene glycol; bis-3-aminopropyl methylamine; ethylene diamine; diethylene triamine; 9(1)-hydroxymethyloctadecanol; 1,4-bishydroxymethylcyclohexane; 8,8-bis(hydroxymethyl)tricyclo[5,2,1,0^{2,6}]decene; Dimerol alcohol; hydrogenated bisphenol; 9,9(10,10)-bishydroxymethyloctadecanol; 1,2,6-hexanetriol; wherein at least one of the alcohol or amine groups present therein has been reacted with ethylene oxide, propylene oxide or mixture thereof; and combination thereof.

Amendment dated June 26, 2009 Reply to Office Action dated January 26, 2009

50. (New) The vegetable oil based polyol of Claim 12 wherein the vegetable oil based polyol is a liquid and has a weight average molecular weight of at least 1500.

- 51. (New) The vegetable oil based polyol of Claim 51 wherein the weight average molecular weight is at least about 1800.
- 52. (New) A polyurethane comprised of the reaction product of a polyisocyanate and the vegetable oil based polyol of Claim 46.